FISHERIES DIVISION MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Southern Lake Michigan

Management Unit



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What is the SLMMU?

The Southern Lake Michigan Management Unit (SLMMU) encompasses all of the lakes and streams that make up the watersheds that drain into the southern portion of Lake Michigan. Our work area includes all or portions of the following counties: Muskegon, Montcalm, Gratiot, Ottawa, Kent, Ionia, Clinton, Shiawassee, Allegan, Barry,



Eaton, Ingham, Van Buren, Kalamazoo, Calhoun, Jackson, Berrien, Cass, St. Joseph, Branch, and Hillsdale. Most fisheries staff within this unit work out of the Plainwell Customer Service Center and include an Acting Unit Manager, a Fisheries Biologist, a Technician Supervisor, two Technicians, a Fisheries Stateworker, and an Administrative Assistant. Our two creel clerks work the ports of Grand Haven, Holland, Port Sheldon, South Haven, and St. Joseph.



Walleye Stocking

Each spring, staff

from the SLMMU coordinate the walleye egg take on the Muskegon River. Eggs from the Muskegon River are hatched at Wolf Lake State Fish Hatchery in Mattawan. Some of the walleye fry are directly stocked into rivers. In 2015, the Kalamazoo River received 3,103,200 fry in Kalamazoo and Allegan counties, and Lake Maca-

tawa received 650,000 fry. Some of the fry were transferred to the Muskegon, Belmont, Gun Lake, Union Lake, Holland, Wolf Lake, and Jackson rearing ponds. Most of the walleyes from these ponds were collected as spring fingerlings (approximately 1.2-1.5 inches) in late May-early June and stocked in public waters. A total of 1,217,690 spring fingerling walleyes were raised in SLMMU ponds in 2015! An additional 9,777 fish were collected from these ponds in late September-early October as fall fingerlings (about 5.5-8.0 inches) and stocked in seven lakes in southwest Michigan. Below are the waters that were stocked within the Southern Lake Michigan Management Unit in 2015 (others were stocked in Central Lake Michigan Management Unit waters):

Spring Fingerling				Fall Fingerling	
Black River	13,291	Lake Macatawa	50,381	Palmer Lake	2,122
Cedar Lake	18,018	Magician Lake	31,202	Clear Lake	1,000
Crystal Lake	36,000	Matteson Lake	16,588	Sand Lake	500
Duck Lake	50,193	Portage Lake	40,183	Selkirk Lake	470
Fish Lake	17,589	Sessions Lake	7,000	Wabasis Lake	2,000
Galien River	10,282	St. Joseph River	117,448	Lake Macatawa	230
Grand River	94,587	Union Lake	20,627	Lincoln Lake	1,655
Gun Lake	62,331			Portage Lake	1,800

Partnership Spotlight

One big area of fish management where we depend on cooperatives is in the production and rearing of walleye finger-lings. We have multiple partnerships in several counties that supply physical and financial support each year.

Our newest fishing club to volunteer is the Holland Game and Fish club. We are excited to have them on board to assist in walleye rearing as they bring a lot of enthusiasm and interest in helping the local fishery. The club was organized in 1922 and they currently have 375 members. The club is unique in that they have a rental facility that allows them to bring in income that they are looking to reinvest into outdoor activates.

The Holland Fish & Game Club
10840 Chicago Dr., Zeeland, MI 49464

est

The club is fortunate to have four ponds on its property near Holland.

These ponds were used back in the day (but not since the late 90's) to raise walleye, trout and even for the imprinting of salmon.

The club's leadership expressed interest in rearing walleye and possibly muskellunge with the goal of enhancing the fishery in Lake Macatawa. They certainly have the perfect set-up as the main pond is drainable and it dumps directly into a tributary stream feeding into the lake. This series of ponds is like a little hatchery system connected to the lake. The club's goals started to be realized this past year when they raised and planted 50,381 spring fingerling walleyes averaging 1.3 inches, and another 230 fall fingerling walleyes which averaged over 6inches in length.

The club worked every step of the way with our SLMMU's oversight. They did great work which included filling the ponds, fertilizing each week, raising fathead minnows, and monitoring fish growth and health. They paid for the supplies and learned the processes of the rearing cycle.

The club had a great first year and a nice crop of walleyes for Lake Macatawa to show for their effort. Great Job and THANKS for all your good work!!



Lake and Stream Surveys

PAGE 3

During the spring, summer, and fall of 2015, the SLMMU staff completed surveys on nine lakes and thirteen streams (some streams had multiple sampling locations and some were conducted for other Units). These surveys included walleye and brown trout stocking evaluations, status and trends surveys, fish community surveys, habitat improvement evaluations, and natural resource damage assessments. Most stream surveys use electrofishing gear while lake surveys use a combination of netting and electrofishing gear to sample fish. Waterbodies surveyed in the SLMMU during 2015 include:

Barkley Creek (Kent County) Big Meadow Creek (Berrien County) Carter Lake (Barry County) Crooked Lake (Van Buren County) Grand River (Eaton County) Grand River (Ionia County) Grand River (Kent County) Gun Lake (Barry County) Hemlock Lake (Cass County) Highbanks Creek (Barry County) Honey Creek (Kent County) Kalamazoo River (Allegan County) Kalamazoo River (Calhoun County) Kalamazoo River (Kalamazoo County) Lime Lake (Kent County) Little Crooked Lake (Van Buren County) Looking Glass River (Ionia County) Pokagon Creek (Cass County) Prairie River (Branch County) Silver Creek (Allegan County) Spring Brook (Kalamazoo County) Talmadge Creek (Calhoun County) Tamarack Lake (Eaton County) Thornapple River (Barry County)

Grand River Creel Survey

Creel surveys are a tool used by fisheries managers to assess fishing effort, catch rates, and harvest of important game fish species. Such surveys are conducted at major Great Lakes ports every year. In 2015, SLMMU had the opportunity to complete a creel survey on the Grand River in Kent County. Two sections of the Grand River were covered: Lowell to West River Drive, and Riverside Park to Johnson Park. The portion of the Flat River from Lowell Dam to the confluence with the Grand River also was included in the survey. During March 21-September 30, a creel clerk was assigned to work on the river during all weekend days and three randomly selected weekdays each week. Shifts varied between mornings and afternoons. The clerk made instantaneous angler counts at randomly selected times and interviewed as many anglers as possible each shift.

During the survey period, we estimate that there were 12,079 angler trips on these reaches of the Grand and Flat rivers. Redhorse suckers were the most common species in the catch (which includes harvested fish and released fish), followed by smallmouth bass, steelhead, rock bass, and bluegill. In terms of harvest, steelhead topped the list, followed by bluegill, coho salmon, and channel catfish.

2016 Lake and Stream Surveys

During the spring and early summer, our unit conducts fish community surveys on lakes. Early spring work often includes population assessments of northern pike, walleye, or muskellunge during the spawning seasons for these species. General lake surveys are completed in Mayearly June when water temperatures are between 55 and 75 degrees Fahrenheit. Our stream surveys primarily are conducted during July-early September. A variety of gear types are used on lakes including nets and night-time electrofishing gear, whereas day-time electrofishing is the main gear used on rivers and streams.

We plan to complete surveys on the following waters in 2016:

Gravel Lake (Van Buren County)

Grand River (Kent, Ionia, & Eaton counties)

Thornapple River (Barry County)

Thornapple Lake (Barry County)

Kenyon Lake (Branch County)

Oliverda Lake (Branch County)

Baw Beese (Fourth) Lake (Hillsdale County)

Long Lake (Ionia County)

Looking Glass River (Ionia County)

Pokagon Creek (Cass County)

Silver Creek (Allegan County)

Spring Brook (Kalamazoo County)

Kalamazoo River (Calhoun County)

Mill Creek (Berrien County)

East Branch Paw Paw River (Van Buren County)

Talmadge Creek (Calhoun County)

Little Paw Paw Lake (Kalamazoo County)



Links to our most recent Status of the Fishery Reports

- Indian Lake, Cass County: http://www.michigan.gov/documents/dnr/2015-199_495402_7.pdf
- McCoy Creek, Berrien County: http://www.michigan.gov/documents/dnr/2014-194_480644_7.pdf

Gun Lake

Gun Lake (Barry and Allegan counties) is a large lake with a surface area of 2,680 acres and a maximum depth of 68 feet. Aside from a stretch of the north shore that is part of Yankee Springs State Park, the shoreline of the lake is heavily developed with residential and vacation homes. Two surveys were completed on this lake in 2015. Netting was conducted in early April to assess abundance of walleye, northern pike, and muskellunge. During this effort, 214 walleyes, 227 northern pike, and zero muskellunge were collected. The largest walleye was 26 inches and the largest northern pike was 35 inches. Walleye stocking by MDNR and the Gun Lake Protective Association clearly has produced a viable walleye fishery in the lake.

A general fish community survey also was conducted in May as part of MDNR's Status and Trends Program. This survey involved the use of three different types of nets, seines, and night-time electrofishing gear. A total of 12,451 fish were captured, representing 28 fish species. The most common forage fish species were bluntnose minnows, mimic shiners, and blacknose

shiners. Together these three species made up 85% of the catch by number, but only 6% of the total sample weight. Bluegills were the most abundant game fish in the catch and varied in length from 1 inch to 9 inches. Pumpkinseeds, yellow perch, and black crappies also were common. Largemouth bass (2-19 inches) were the most abundant predators collected during this sampling effort, followed by northern pike (11-30 inches), walleye (10-23 inches), and smallmouth bass (3-15 inches). Predators accounted for 44% of the total weight, which was within the target range of 20-50%.

Scale and spine samples were collected from fish during the 2015 surveys. These samples currently are being processed by SLMMU technicians and will provide information on the age structure of fish populations and growth rates for individual fish in Gun Lake.

The 2015 Gun Lake surveys could not have been completed without assistance from the Gun Lake Tribe, Wolf Lake State Fish Hatchery personnel, and volunteers.

Thank you for all your help with this project!!!







GUN LAKE TRIBE









What if I catch a tagged fish?

Some of the walleyes captured during the 2015 survey on Gun Lake were marked with metal jaw tags. In addition, large-mouth bass were tagged in this lake in 2013 as part of a bass population study. Anglers who catch tagged fish are asked to report this information online at http://www.michigandnr.com/taggedfish/tags or by calling the Plainwell Customer Service Center at 269-685-6851.

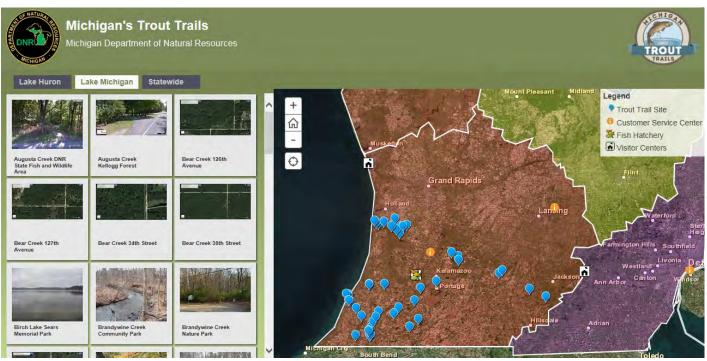
Trout Trails

Are you looking for a place to go trout fishing? The new Trout Trails website can help. This site has information on public access sites, trout species present, and sizes of fish to expect for select waters throughout the state, including several lakes and streams in southwest Michigan. Visit the following website for more information: http://

www.michigan.gov/dnr/0,4570,7-153-

10364 52261 72113---,00.html









Species Spotlight - Cisco

The cisco (also known as lake herring) is a species of whitefish that is native to the Great Lakes and deep inland lakes in Michigan. They are silvery fish that commonly reach 10-12 inches in length but are capable of growing to over 20 inches in lakes with abundant forage. Ciscoes are considered by many people to be excellent table fare. Populations of ciscoes were reduced in some lakes due to historic gill net fisheries. Today, this species occasionally is targeted by recreational anglers, with most fishing effort occurring in late fall and winter.

Ciscoes require cold, well-oxygenated water. This requirement makes them especially vulnerable to habitat deterioration. For example, increased nutrient loading to lakes due to runoff from fertilized lawns and agricultural fields often results in reduced oxygen concentrations in the deeper waters of lakes during the summer, and biologists believe such habitat changes were responsible for the disappearance of ciscoes from several Michigan lakes. The cisco currently is listed as a threatened species in Michigan.

SLMMU personnel conduct water quality testing and netting surveys in one or two historic cisco lakes each year to assess potential habitat and determine if ciscoes are still present. The timing of the netting surveys is critical. During most of the year, these fish are suspended offshore and are not vulnerable to sampling gear. In late fall, ciscoes move into shallow water to spawn over gravel or rocky shoals. Thus, sampling generally is limited to the week prior to ice formation on area lakes.

Habitat protection is crucial for sustaining or enhancing existing cisco populations. Protection measures include preservation of cisco spawning shoals, seasonal restrictions on shoreline stabilization projects (to avoid spawning and early juvenile periods when ciscoes are in shallow water), and use of best management practices on neighboring lands to reduce inputs of sediment and nutrients.





Habitat Enhancement

High Banks Creek

High Banks Creek is a small trout stream in Barry County that has been the focus of two major habitat improvement projects. The remains of an old grist mill dam (Morgan Dam) were removed from the creek in November 2014. However, the stream channel upstream of the dam in the former impoundment area continued to be unstable. During September 2015, a new technique called "toe wood" was used to stabilize eroding stream banks in this area. The construction crew excavated the eroding banks and placed large logs on the newly excavated shelves. Small logs and brush were added before covering the toe wood with dirt and transplanted vegetation. Multiple partners were involved in the High Banks



Creek project, including the Barry Conservation District (BCD), the Habitat Management Unit of MDNR – Fisheries Division, the MDNR – Parks and Recreation Division heavy equipment crew, and private contractors. In addition to reducing erosion, an important objective of toe wood installation was to provide habitat for fish and aquatic invertebrates. Subse-



Catch for the Ages!!!

Large walleye in Southern Michigan lakes are rare – especially walleye over 10 pounds!

Jim Beilfuss caught this 31 inch 10 lbs 4 oz beauty in Duck Lake (Calhoun County) in 1975. Mr. Beilfuss recently donated the mount to the DNR Plainwell Customer Service Center where it is proudly displayed.





PAGE 10

Check out the new online apps!!











Interested in Learning More about Fisheries Division?

Visit our web page www.michigan.gov/fishing

- Read our 2013-2017 Strategic Plan.
 - http://www.michigan.gov/documents/dnr/fshstrtpln_513848_7.pdf
- Buy a fishing license.
 - http://www.mdnr-elicense.com/Welcome/Default.aspx
- Read or sign up to receive weekly fishing reports.
 - http://www.michigan.gov/dnr/0,4570,7-153-10364 59567---,00.html
- Subscribe to email updates on a variety of topics.
 - https://public.govdelivery.com/accounts/MIDNR/subscriber/new?topic_id=MIDNR_II4

Where Do We Stock Fish?

The SLMMU works closely with our hatcheries to stock fish in the near-shore waters of Lake Michigan and inland lakes and streams. To find out where we stock fish, and the history of fish stocking back to 1979, visit http://www.michigandnr.com/fishstock/ to use our online Fish Stocking Database.

Where Else Can I Fish Around Here?

Family Friendly Fishing Waters

Are you looking for a great place to go fishing that is easy to access, has a high likelihood of catching fish, has various amenities, and is all around family-friendly? Then the Family Friendly Fishing Waters project can help!

http://www.michigan.gov/dnr/0,4570,7-153-10364-299046--,00.html

Do you know of Family Friendly sites that are not already identified? If so, we need your help! There is a survey at the above web site to nominate new sites. Thanks! Also check out—

Where Can I Fish?

http://www.michigan.gov/dnr/0,4570,7-153-10364_52261---,00.html

ISSUE 4 PAGE II

To obtain information on lake or stream surveys from this year or years prior or to ask any questions, please feel free to contact us. Use the map below to select the most appropriate biologist to contact;



MDNR Fisheries Division Southern Lake Michigan Management Unit Areas of Responsibilities

